

CATS

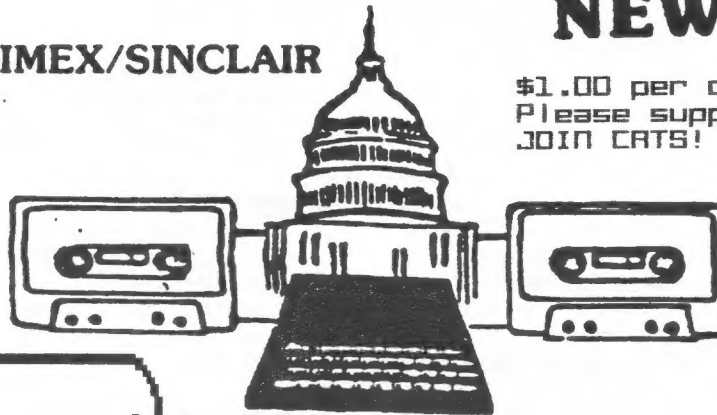
CAPITAL AREA TIMEX/SINCLAIR
USERS GROUP

NEWSLETTER

\$1.00 per copy
Please support your computer
JOIN CATS!

Volume 5, Number 6

September, 1987



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DON'T FORGET

CATS PICNIC

SATURDAY, SEPTEMBER 26

GREENBELT PARK

HOLLY PICNIC AREA

11:00AM TILL DUSK

PRESIDENTIAL RAMBLINGS

First on the list of things to mention is the **CATS PICNIC!** Mark the date on your calendar, September 26th. Read the fine print inside this issue.

QL DEAL

We have all been hoping to be able to get a brand new QL for under \$100. This deal through Sharp's has been delayed, awaiting word from A+. However, the QL is still a great buy at \$189. We will keep you informed of the progress.

I got an inside look at the Thor computer recently. It is considerably expanded over the QL. It has true parallel and serial ports, but it's still a QL. CST went through great lengths to keep QL owners from being able to convert to a Thor without their hardware. The 68020 board from CST actually plugs into the QL and runs, but it fits into the 68008 socket and cannot be modified for the 32 bit data bus, which would give blinding speed.

Spectrum Compatibility on your 2068

I also recently spoke to Larry Kenny of Larken Electronics, in Canada. He has a 2068 disk interface that will run in Spectrum mode. He also has a board that will run both the Aerco and Oliger disk interfaces in the Spectrum mode. I consider this a very worthy add on to the 2068. In speaking to him he said he would honor a group buy. Any takers?

1000 and PC8300 Compatibility

Fred Nachbaur now has the TS 1000 ROM working on the PC8300, making it 100% compatible with 1000 software. He also has some exquisitely engineered Hi-Res software for both machines too. The TS 1000 requires the SCRAM board or memory in the 8 to 16K block and a diode modification to the RD line.

Tom

FROM THE EDITOR

By the time you read this, the summer will be nearly over and our meetings will be run by the new board. John will have departed for sunnier climes (read HOT) and I will be firmly "ensconced" in the editor's chair. It is with a sense of intrepidity that I approach the editor's job. As I've stated in my QL column, I'm no guru when it comes to computers. I understand the technology and, hopefully, the applications for which it is being used. This brings up the central thrust of this editorial and probably many others during my tenure. This newsletter will only be as good, contentwise, as you make it. Every month I will try to excerpt the most interesting articles from the many newsletters that are sent to C.A.T.S., but, without contributions from our own members, we may as well save our money and just let the members read the news from the other groups at the meeting. It is my intention to have some months devoted primarily to a single model computer since I can see that there is still a lot of interest in the TS1000/ZX81, TS1500, and TS2068. In addition, we will try to cover the "hot" areas such as desktop publishing and telecommunications.

Speaking of desktop publishing, you might notice that our format is changing. As I become more familiar with Desktop Publisher, you will see more of the newsletter being produced with that program. Text entry is still laborious, despite the fix suggested by Joe Morris in the Curry Report. Installing a printer driver with a carriage return gives a .lis file without all the extraneous symbols, but the text still needs a lot of format and spacing work. You will also notice that our text is larger than many newsletters using DTP. We are using CSize 2,0 which closely approximates Pica type (10 characters/inch). This should make it easier on the eyes.

I certainly hope that the proposed QL buy comes off, not just

because I've got my name on the list, either. I'm a strong believer in the QL and I know that the greater the installed base, the greater the interest, which should ultimately translate into continued support for our machines from hardware and software vendors. This is, I think, the secret to the longevity of a computer, something the QL deserves.

Again, let me make a pitch for your support in the form of programs, applications of existing programs, and letters. I would hope that everyone can find a home in one of those three areas. I hope you enjoy my "premier" issue.



SEPTEMBER MEETING AGENDA

12:00 Hardware Workshop

2:00 General Meeting
Committee reports
Treasurer
Membership
Picnic
Others
Old Business
New Business
Vote on By-Laws
Adjournment

Presentation:
The Psion Organizer

NEWSLETTER SUBMISSIONS

Submissions for the newsletter can be in hard copy, with columns 35 characters wide, or, preferably, magnetic media. For the QL, microdrive cartridge, 5 1/4" DS/DD or Quad density disks, or 3 1/2" disks. For the ZX81, TS1000, or 2068, cassettes only, with titles on the box.

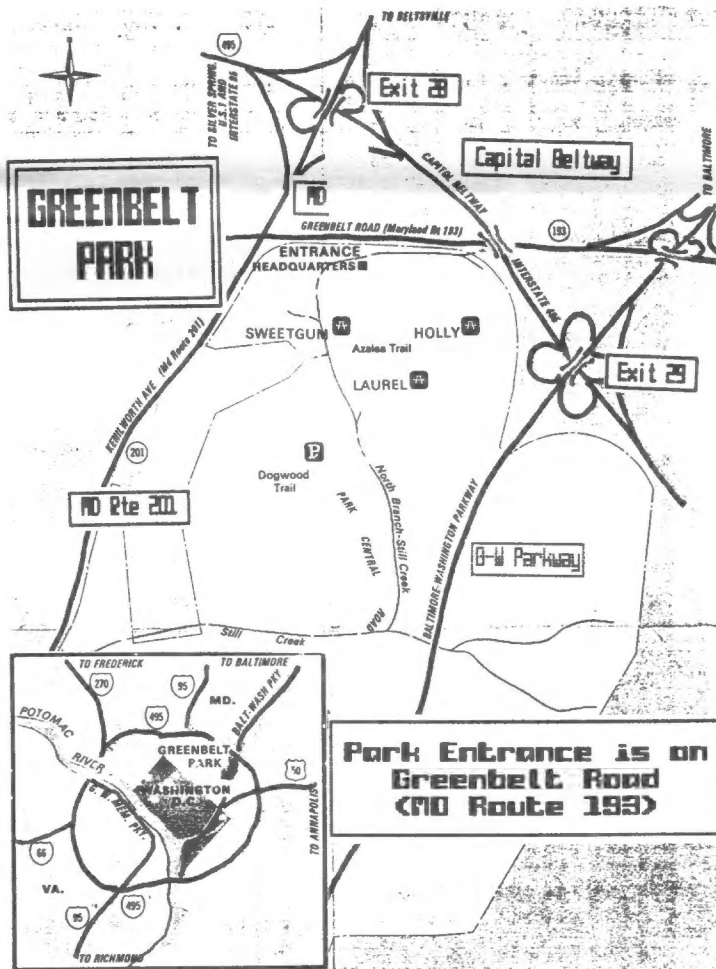
Send material to:
Editor, CATS Newsletter
Box 467
Fairfax Station, VA 22039

"Picnic in the Park"

It's official! Our first annual picnic will be held on September 26 at Greenbelt National Park in the Holly picnic area. For those of us that aren't familiar with the park and/or Prince George's County, I have included a map at the end of item. The Club has approved \$50 toward the purchase of charcoal and soft drinks; you bring the rest. The festivities will start at 11 A.M. and last till dark. Incidentally, Tom Bent has decreed that anyone bringing a computer to the picnic will automatically be fined \$25.

PLEASE NOTE

In case of rain the picnic will be CANCELLED. I was unable to get a back-up date.



CATS MEMBERSHIP INTEREST SURVEY RESULTS

During the CATS August meeting the attending membership were polled as to their "Topics of Interest", as a means to guide the Executive Board in planning programs for future meetings. A partial list of PC topics was made available with a request to indicate a high (H), medium (M), or low (L) level of interest and to add topics not listed.

Using a weighted value of 3 for H, 2 for M, and 1 for L, I have analyzed the data and grouped the topics into the four broad categories--Uses, Hardware Modifications, Peripherals, and Instructional. The results are shown below with the interest level expressed as a numerical value. Each * signifies the availability of a VHS video tape related to the topic which I hope to incorporate into future meeting programs.

Uses	(103)
** Programs	29
Utility Programs	29
* General	16
Interact Progrms	14
** Compuserve, etc.	6
Hardware Modifications	(93)
General	31
*** Interfacing	26
Intfce Periphs	19
Tape to Disk	8
Memory Expansion	5
QL Midi IF	4
Peripherals	(71)
Input/Str Devices	24
Modems	13
Printers	9
Monitors	6
Pwr Surge Protec	6
* Systems	5
I nstructional	(33)
** Programing	22
Driver Programing	11

Thank you all for the help.

Loan Amortization on the QL by Mark Fisher

This Abacus spreadsheet program is a companion to the 2068 BASIC program by Al Strauss (CATS N/L April 1986). It was developed from the Loan program in the QL manual, and extended to include the yearly information as generated by Al's program. Both programs provide monthly and yearly totals of interest and principal paid.

After looking over the first printed draft of this article, I could see that it might be pretty daunting. Try it! If you take it in little steps, it really isn't impossible - and the cell duplication abilities of Abacus allow you to fill the 2000+ cells of this application with perhaps 100 entries. In addition, you can get useful information out of the program after stopping before Part Two.

The first step after loading Abacus, is to press F3-D to get to the design menu. Several of these settings need to be changed for our US standard printers. We want:

- 1) Blank on zero.....yes
- 2) Form feedno (yes if you use fanfold paper)
- 3) Gaps between lines...no
- 4) Lines per page.....58 (66 is British standard)
- 5) Monetary symbol..... (blank - you don't want columns of \$\$\$ in your spreadsheet)
- 6) Printer paper width..138 (characters wide - I set the printer driver for Abacus up to automatically switch the printer to compressed pitch.)

Now back to the main program.

at:	type:	comments:
A1	"MORTGAGE REPAYMENT CALCULATOR	
C2	rept("=",len(c1))	underlines C1
B4	"Loan	
C4	askn("Amount of loan")	equals INPUT in basic
H4	askn("Percentage interest rate")	
B5	"Int rate	
C5	h4/100	input converted to dec. fraction
Now press F3-U(nits); Cells,Percentage,Decimal places 2,Range c5		
B6	"Term	
C6	askn("Period of the loan in years [maximum = 35]")	you can extend this program beyond that if you like, but it'll take up a lot of room on your microdrive.
E5	"Mnth	
F5	"Yr	
D6	"Start	

E6	askn("Month of first payment [1=Jan, 2=Feb, etc.]")	
F6	askn("Start year ")	
E7	'(' + month(e6) + ')'	note single quotes
D8	"REPAYMENTS	
Press F3-C(opy); from range c2, to cell d9		

C10	"Monthly
C11	"Annual
D10	$c4 * (c5 / 12) / (1 - (1 + (c5 / 12))^{-(c6 * 12)})$
D11	d10 * 12
D12	d9

Try F3-X(ecute) to see it work.
Press F3-U(nits),Cells,Monetary,Minus sign,c4
Press F3-U(nits),Default,Monetary,Minus sign
Press F3-J(ustify),Cells,Numbers,Left,Range a1:a08

Looks better now, doesn't it?

Part Two: the Repayment Table

Here's where we really move away from the example in the QL manual. The manual's layout provided only remaining balance by month, and was limited by the spreadsheet's width. This version provides monthly and yearly figures on interest and principal paid as well. In addition, you could easily extend it to account for a 200 year repayment period!

at:	type:	comments:
C15	"REPAYMENT TABLE	
press F3-C(opy),from range C2, to cell C16		
A17	"Year	
C17	month((col()-3)/3+1)	month names every third col.
C18	"Bal.	
D18	"Int.	
E18	"Princ.	
Press F3-C,range C17:E18,to cell F17		
A19	\$F6+row()-19	puts year in first column
Press F3-C(opy),range A19,to cell A20		
C19	if(col()/3=\$E6,\$C4,0)	if this is the starting month, enter the balance; else, enter zero. The other 'bal.' columns have a slightly different formula to carry the current balance across if not zero (see cell F19, below).
D19	if(C19).005,\$C5*C19/12,0)	figures interest on balance
E19	if(C19).005,\$D10-D19,0)	figures princ. paid this mo.
F19	if(col()/3=\$E6,\$C4,C19-E19)	
C20	if(AJ19-AL19).005,AJ19-AL19,0)	

That's almost all the formulas. Now to spread them around:

Press F3-C(copy),range D19:E19, to cell D20
 Press F3-C(copy),range D19:E19, to cell G19
 Press F3-C(copy),range F19:H19, to cell F20

Now to spread the formulas across the top of the table:

Press F3-C(copy),range F17:H20, to cell I17
 Press F3-C(copy),range F17:K20, to cell L17
 Press F3-C(copy),range F17:Q20, to cell R17
 Press F3-C(copy),range F17:N20, to cell A017

Now they're all the way across. If you look at it, you'll see "January" in every third cell, but don't worry - it'll straighten itself out when you first use it.

It's time for the summary side of the table. First, we'll copy the basic figures over above the totals columns, for easy reference:

Press F3-C(copy),range A1:F12, to cell AK1

We want the figures over there, but we don't want a second copy of the setup formulas. So:

AM4 C4

Press F3-E(cho), cell AM4, over range AM5:AP11

AM16 "Totals for Year

Press F3-D(copy),range C2, to cell AM17

AM18 "Total interest paid

A018 "Total principal paid

Press F3-E(cho), cell A19, over range AM19:AM54

AM19 D19+G19+J19+M19+P10+S19+V19+Y19+AB19+AE19+AH19+AK19

Phew! But you only have to type it once:

Press F3-E(cho), cell AN19, over range AN19:A020

Now all of row 20 can be spread on down the table:

Press F3-C(copy),range A20:A020 to cell A21

Press F3-C(copy),range A20:A021 to cell A22

Press F3-C(copy),range A20:A023 to cell A24

Press F3-C(copy),range A20:A027 to cell A28

Press F3-C(copy),range A20:A035 to cell A36

Press F3-C(copy),range A20:A023 to cell A52

Time to try it out! I'll include some portions of a sample printout - your figures should be identical to mine for the given loan value. I've checked this program against A. Strauss's, and they match.

Happy Accountanting!

MF

	A	B	C	D	E	F
1	MORTGAGE REPAYMENT CALCULATOR					
2	=====					
3						
4		Loan	2000.00			
5		Int rate	13.00%	Mnth	Yr	
6		Term	4 Start	2	1776	
7					(February)	
8				REPAYMENTS		
9				-----		
10		Monthly	53.65			
11		Annual	643.86			
12				-----		
13				goto A01 for yearly totals		
14						
15		Repayment Table				
16		=====				
17	Year	January				February
18		Bal.	Int.	Princ.		Bal.
19	1776					2000.00
20	1777	1628.44	17.64	36.01		1592.42
21	1778	1169.57	12.67	40.98		1128.59
22	1779	647.37	7.01	46.64		600.72
23	1780	53.08	0.58	53.08		
24	1781					

	AK	AL	AM	AN	A0	AP
1	MORTGAGE REPAYMENT CALCULATOR					
2	=====					
3						
4		Loan	2000.00			
5		Int rate	13.00%	Mnth	Yr	
6		Term	4 Start	2	1776	
7					(February)	
8				REPAYMENTS		
9				-----		
10		Monthly	53.65			
11		Annual	643.86			
12						
13				Totals for Year		
14				=====		
15						
16						
17						
18	Int.	Princ.	Total interest paid	Total principal paid		
19	18.03	35.63	1776	218.64	371.56	
20	13.11	48.55	1777	184.99	458.87	
21	7.51	46.14	1778	121.66	522.20	
22	1.14	52.51	1779	49.57	594.29	
23			1780	0.58	53.08	
24			1781			

ICE Your QL

The following is my summary of "QL on I.C.E." by Robert Adam (CTM Magazine, September 1986).

In my search to expand the inter-activeness (multi-tasking?) of my QL programs I purchased a utility program called ICE (Icon Controlled Environment). This is available as an EPROM external add-on to, or can be incorporated into the QL itself with an internal hardware mod.

ICE provides an icon (image) control of a menu of action choices and a directory which allows access to files and programs from microdrives. You do this by commands issued by moving an arrow pointer around the screen display until it points at an action choice, file, or program, or whats available to you through ICE. You activate a command by one or two clicks of the space bar, joystick, or mouse, and the QL will perform the task. When you power-up the QL the ICE routines are added to the operating system with the selection of the F1 (monitor) mode of screen display. So, bye-bye the need to type in SuperBASIC (SB) commands, and in comes the capability to get from program to program.

Once the ICE display is on the screen you have a pointer which you move about with the arrow cursor keys, joystick or mouse. The screen has different areas and the majority of the center portion of the display is blank. This area is used to graphically display the directory contents of your chosen microwdrive (md) cartdridge or floppy disk (fp) when you command its display by two clicks of the space bar with the pointer in the proper icon box.

If a file is either named "BOOT" or ends with the extension "bas", you see a box with "SB" for SuperBASIC. In a machine coded executable file "EX" replaces "SB". The EX files are those which may be multi-tasked

using ICE's companion program Choice (CH). If a program has a designated "b" task by CH it will show as an outlined "T". A help file contains the extension "hlp" with a box with a ? in it. These CH files are recognized by ICE without the need of using any special extensions and are read directly to the screen. Psion programs, Abacus, Easel, etc., have their own appropriate icon depictions on screen. For example, Export files are shown as a suit case. A file that is not recognized by ICE is shown as a file folder. To run a SB or machine code program you place the pointer to the desired icon and click twice. No SB loader is needed to run machine code (EX) files. Do not run any other types of files since they cause the system to crash.

If you want to make back-up copies of a particular file place the pointer to the file you want to copy and click once. The icon will be highlighted, and then move the pointer to the device to which you wish to copy the file and click again. It may even be the same device, as ICE will tell you when to swap the original copy and vice-versa. You can select as many files as you wish and if you want a complete back-up copy of all the files you can use the bottom border menu action selection "BACKUP". You must copy to a formatted cartridge, and that is done by placing the pointer to the "FORMAT" selection and clicking once, which allows you to name and format your medium. If you wish to delete files click the pointer when at the trashbin icon.

The bottom of the screen menu offers other selections. The "SYSTEM" choice will show you the ICE version and number of tasks running (initially two - ICE and SB), the amount of RAM the system has and is available. "RENAME" allows you to rename a previously highlighted file. "VIEW" allows viewing the contents of a file either on the screen or on

printer. You may view help files this way or make a hard copy. "CUSTOM" allows you to set the system clock, rename the default devices, define your printer port and baud rate, and set the speed and sensitivity of ICE controls. "INFO" displays the file name, size, type and date/time of its last upgrade. This info is provided with every file saved while running ICE. The "QUIT" choice brings you back to SB and while in SB, by typing ICE and clicking the enter key, you can get back to the ICE display and mode. The left side of the ICE display allows you to select for use a calculator and, or, a calendar. By adding CH to ICE you add multi-tasking and ramdisk capabilities to ICE. CH is provided on an md cartridge and also comes with mail-merge software and a program to change the colors of the ICE display.

My experience with ICE suggests this utility program can be a usefull way to get around the QL. I am hopefull the more expert ICE users will expand on this summary of Adam's review so we novices can use the QL more effectively.

GEORGE REY

NOTICE MEETING HOURS ARE CHANGING

Beginning with the
OCTOBER
meeting the
HARDWARE WORKSHOP
will start at 11:00 AM

Nominations needed for 1st Annual DUMB Award

How many times have you been working with a program or a piece of hardware and said, "Boy, the way they designed this is DUMB! Why didn't they do it (this) way?" I know I have. So with this issue, I will take nominations for the "First Annual DUMB Award", which will be presented in January. In order to insure that there is at least one nominee, I will nominate Talent for their Sideways program.

In all fairness to Talent, they should be a double nominee for their practice of putting these ridiculous protection schemes on programs, other than their games. No serious QL user should trust microdrives and no software house should force them to rely on such an unreliable medium. But back to Sideways.

Talent starts off with an excellent program, until they get to the printout. Instead of twisting the characters using software, they resort to a downloadable character set. So what, you might ask. Well, most inexpensive printers (the kind most QL owners have), including the QL Printer, don't have this capability or their buffers aren't large enough. To add to the insult, Talent only furnishes one character set with the program. Want more? Design them yourself. Finally, look at Talent's advertising for this program. Nowhere does it indicate that it might not work with some (many) printers. If Talent had been SMART, they would have reverse engineered Funk Software's Sideways program, but no, they were DUMB!

To get your licks in at your "favorite" hardware/software designer, just send your nominations to DUMB, c/o the Editor. I guarantee that all submissions will be printed.



QL on the QT

by Vernon Smith

Well, it's that time again—the time to get this column written—so here goes. Over the past months quite a lot has gone on in the QL world. Some old publications have gone down the tubes (SUM, TS Horizons, and ZX Computing), though in fairness to the US publications their subscription base was assumed by other magazines, thus their readers were not left completely without a source of information. Time Designs got SUM and CTM wound up with TS Horizons. Personally, I think SUM readers got the best deal since Time Designs is a computer magazine while CTM is a magazine for hams, pure and simple, no matter what Chet says. I subscribed to CTM before it went "slick" and Chet discovered packet radio. I certainly don't begrudge him from catering to the packet market, if he feels that is the market he wants to go after. What I do object to is the lack of editorial candor about the magazine's orientation. On the other hand, Time Designs caters to the full range of Sinclair computers, with special emphasis on the 2068, just as ZX Computing did in the UK, emphasizing the Spectrum. The only magazines which are solely devoted to the QL are QL World in the UK and Quantum Levels in the US.

Dealer shake-outs continue and I'm sure we will see more in the future. The two biggies are Curry Computer in the West and Sharp's in the East. Last year Knighted Computers took over English Micro Connection's stock when Bob Dyl quit. Now Knighted has decided to get out of the QL business and concentrate on the 2068, so Mark Steuber of Sharp's has bought their stock. If Mark succeeds in buying A+ Computers remaining QLS, he will definitely be "Mr. QL"!

This month's hardware offerings are fairly sparse. Zebra Systems is selling a Wico trackball modified for the QL for \$29.95. It plugs into the joystick port and can substitute for a mouse in programs set up for mouse opera-

tion (QIMP, DESK, etc.). On my unit, though, the sensitivity is very poor, with many revolutions required to make the cursor cross the entire screen. Zebra sells it as a mouse substitute, so I expected cursor movement as fast as I would get with a mouse. Its only advantage over using a joystick comes when you are using it with a graphics program. A joystick cannot draw a circle while the trackball can. If graphics are your bag, I would recommend that you purchase it. If you work with graphics very seldom or you already have a mouse, save your money. The On-Line Store, (805) 656-3741, is selling an Epson HI-80 4 pen plotter for \$239 plus \$8 shipping. This appears to be an excellent price for a plotter. QL software for using a plotter is available with Techni-QL and Easel Release 3.5. I'll let you know more about the plotter when I have been able to get some experience using one.

If you've been following this column in past months, you'll be familiar with my "never ending" saga of dealings with Sandy PCP in England. Shortly after I filed my last column, I received a reply to my May inquiry requesting modification instructions to run 4 drives and for my mouse. After reading their reply, I thought they were selling hallucinogenic drugs rather than computer parts. They furnished a listing of pins that should be changed, except it listed 9 pins and my mouse has only eight wires! As to the mod for 4 drives, I was advised that such a modification would invalidate the warranty. WOW! I certainly wouldn't want to do that. I wonder if the warranty runs from the time everything works correctly? So much for this chapter of "The Gang That Couldn't Shoot Straight".

As I've said before, let me know what you think. I'll admit I've got strong opinions but, at the same time, I appreciate a well reasoned argument. The Sinclair community has always been populated by "hard core" computerists, so I'm sure I'm not the only opinionated one. I'll try to answer all my mail, either in this column or personally. Till next month.

BYLAWS TO BE VOTED ON AT SEPTEMBER MEETING

Here are the revised by-laws that will be presented for approval to the membership at the September meeting. These By-laws are significantly shorter than the present ones; however, the Executive Committee feels that they are more than adequate for our organization.

ARTICLE ONE: Name of organization

These By-laws create an organization to be known as the Capital Area Times/Sinclair Users Group (CATS). CATS shall be a voluntary, not-for-profit organization.

ARTICLE TWO: Purpose

Section One: General

The purpose of CATS shall be to create and maintain a spirit of helpfulness among owners and users of the Times/Sinclair (T/S) family of computers, and to educate the membership in the uses and applications of these computers.

Section Two: Newsletter

CATS shall publish a Newsletter monthly, or otherwise as the Executive Board (see Article Four Section Three) shall direct, to record the activities of CATS, to announce events of interest to the membership and to exchange ideas concerning T/S computer matters.

Section Three: Miscellaneous

CATS shall serve as a clearinghouse for information on the T/S family. It shall act as a group to make discount purchases. Cats does not assume any obligation to intervene on behalf of any member or other person in connection with any legal proceeding.

ARTICLE THREE: Meetings

Section One: General

Meetings shall be held on the second Saturday of each month or as the Executive Board may direct. Organizational business may be transacted at any meeting at which a quorum (see Article Three Section Four) is present. The meetings shall be conducted in accordance with Robert's Rules of Order.

Section Two: Annual

A meeting shall be held each year in conjunction with the June General meeting for the purpose of electing officers.

Section Three: Executive Board

There shall be a meeting of the Executive Board each month chaired by the President or a Vice-President.

Section Four: Quorums

A quorum for the General and Annual meetings shall consist of 20 members. Five shall constitute a quorum for the Executive Board meeting.

ARTICLE FOUR: Officers, Newsletter Editor, and Members-at-Large

Section One: Officers

The officers of CATS shall consist of a President, a First Vice-President, a Second Vice-President, a Secretary, and a Treasurer. All officers shall be members of CATS and shall serve without compensation.

Section Two: Newsletter Editor and Members-at-Large

A Newsletter editor and three additional members of the Executive Board, all of whom shall be members of CATS, shall be appointed by the President and approved by a majority of the elected officers.

Section Three: Executive Board

The elected officers, the Newsletter editor, and the three Members-at-Large shall constitute the Executive Board.

ARTICLE FIVE: Duties of Officers

Section One: President

The President shall preside at all meetings described in Article Three, shall appoint and abolish temporary committees and shall represent CATS to the general public.

The President shall appoint a replacement for any member of the Executive Board who resigns or becomes unable to serve, subject to the approval of a majority of the Executive Board.

Section Two: First Vice-President

The First Vice-President shall preside at meetings in the absence of the President, shall represent CATS to the general public in the absence of the President when directed, and shall be responsible for arranging and publicizing events and projects of CATS.

In the event of the resignation or other incapacity of the President, the First Vice-President shall serve as President until the next Annual meeting.

Section Three: Second Vice-President.

The Second Vice-President shall be responsible for arranging suitable programs for the general meetings and shall assist the First Vice-President when called upon to do so.

Section Four: Secretary

The Secretary shall keep a written record of all meetings described in Article Three and shall be responsible for notifying all members of the Executive Board of the date and location of its meetings.

Section Five: Treasurer

The Treasurer shall receive and disburse all monies belonging to CATS. No expenditure shall be made by the Treasurer without the approval of the Executive Board (see Article Eight Section One). The Treasurer shall keep an accurate record of all accounts and shall report on the state of the finances of CATS at the General meetings. On the expiration of the term of office of the Treasurer all monies, accounts, records and receipts shall be turned over to the incoming Treasurer.

ARTICLE SIX: Election of Officers

Section One: Term of Office

The term of office shall run from July 1 to June 30.

Section Two: Nominations

A Nominating Committee, appointed by the President and approved by the Executive Board, shall present a slate to the membership at the May General meeting. The final slate will be published in the June newsletter.

Section Three: Elections

The Nominating Committee Chairman shall conduct the election of officers during the Annual meeting.

ARTICLE SEVEN: Membership, Dues, and Newsletter subscriptions

Section One: Membership

A membership in CATS shall last for twelve months and shall include a Newsletter subscription. A membership may include an entire family, but it entitles the family to only one vote.

Section Two: Dues

Dues shall be determined by a majority vote of the membership at a General meeting.

Section Three: Non-member Newsletter Subscription

A Non-member Newsletter subscription shall be available for a twelve month period. Its rate shall be determined by the Executive Board.

ARTICLE EIGHT: Finances

Section One: Obligations

Authority for the payment of bills shall be made by the Executive Board.

Section Two: Authorized Signatures

CATS' checks shall be signed only by the Treasurer or President.

Section Three: Audit

An audit of all CATS' financial records shall be conducted immediately following the closing of the Treasurer's term of office and shall be presented to the membership at the next General meeting. The audit shall be conducted by two members of CATS who do not serve on the Executive Board. They shall be appointed by the President and approved by the Executive Board.

Section Four: Projects

Official projects shall be approved by the Executive Board. Monies from all official projects of CATS shall be accounted for and routed through the treasury. No property of CATS shall be disposed of without a majority vote of the membership at a General meeting.

ARTICLE NINE: Standards of conduct

It is the policy of CATS that software piracy and theft of intellectual property is incompatible with its goals.

ARTICLE TEN: Amendment

These By-laws may be amended by raising the issue with the Executive Board. If supported by a majority vote of the Board, they shall present the change at the next general meeting, where a two thirds (2/3) vote of the membership present shall decide the change. Any proposed change, and the final version, shall be printed in the Newsletter sent to members.

TIMEX SINCLAIR COMPUTER FEST COMES EAST

After two successful T-S computer fests in the mid-West (Cincinnati and Indianapolis) it seems that everyone wants to get in on the action. There will be fests in the LA and San Francisco Bay areas in 1988. Closer to home is Winter Fest '88 being organized by the T/S Users Clubs of Florida. This will be in the Orlando area, which will be a great drawing card for families. I'll keep you posted, but for those that can't wait, they have set up a bulletin board, the "Sunstate T/S Bulletin Service" at (904) 775-0093. It's up 24 hours a day, 7 days a week, and is 300 baud, 7-1-Even. Check it out.

WANTED

The newsletter is looking for an electronic graphics artist or any one that would be willing to design our page one logo, Capitol and computers, etc. on one of the QL graphics programs. With this in hand we will be able to set up that entire page using Desktop Publisher. With this hurdle overcome, we will start to work on getting submissions on magnetic media, rather than hard copy. With the exception of articles from other newsletters, "paste up" will be with electronics rather than a glue stick.

QL TIP

USING A 1200 BAUD MODEM
WITHOUT A MODAPTOR

```
QL{SER2ir}(DB-9)      MODEM(DB-25)
Pin
1- GND  ----->  7 - Signal Ground
2- TxD  ----->  2 - TD
3- RxD  ----->  3 - RD
4 & 5-No connection
9- +12v -----> 20 - DTR
9- +12v ----->  4 - ???
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These connections were used with an Avatex 1200 modem. Pins 6, 7, & 8 on the US QL are tied to gnd.

Excerpted from "Playing with Electricity-Summer/87" by Harvey Taylor. From ZX-Appeal, Vancouver Sinclair Users Group

TS 2040 PRINTER SWITCH

From ZX-APPEAL, Vancouver Sinclair Users Group-Summer, 1987

THE FOLLOWING ARTICLE IS REPRINTED FROM THE JANUARY/87 ISSUE OF TIMELINEZ - THE JOINT NEWSLETTER OF THE THREE T/S USER GROUPS IN THE SAN FRANCISCO BAY AREA.

TS2040 Printer Switch..... by John Ezike

DISCLAIMER: Neither VSUG, ZXappeal, nor the author accept any responsibility for any damage that might occur if you attempt this project.

The reason for adding a switch is that even after pressing the 'off' button to turn the printer off, power is still being supplied to the printer! The on/off switch only controls the print driver. Leaving the printer on for very long periods of time could cause it to overheat and be damaged. You could unplug the power when not using the printer, however frequent plugging and unplugging can wear out the plug and jack. The idea is quite straightforward and simply involves cutting the trace through which power is supplied to the printer and jumpering the cut trace with a switch. A LED (light emitting diode) is used to indicate power is on. For this article I will use Radio Shack parts numbers as it will make them easier to locate.

PARTS LIST:

- 1 - SPDT MICROMINI SWITCH, *275-625
- 1 - LED *276-041
- 1 - 470 OHM RESISTOR 1/4W 5% *271-1317
- 22 GAUGE HOOK-UP WIRE

You can get the parts from any electronics store, just make sure the specifications are the same. Cut two 8 inch lengths of the hook-up wire and remove 1/4 inch of the insulation from all four ends. Clear your work area, making sure there are no small

particles lying around that could enter the printer mechanism and damage it. Plug in the printer. Remove the paper from the printer by cutting the paper at the roll and pressing the 'on' button until the remaining paper comes out. Unplug the printer and turn it over. Remove the four screws, placing aside carefully for safe-keeping. Holding the case together, turn the printer back upright. Carefully lift off the top half of the case and place to one side. You are now looking at the component side of the printed circuit board (PCB). See Fig.1. In the top right hand corner is seen the heat sink and in front will be the printer mechanism. Two amber-colored flexible ribbon connectors are plugged into two sockets labeled J1 and J2. Carefully remove each connector by holding the sides and pulling upwards. You might have to move it from side to side while pulling. With the connectors free, remove the printer mechanism. There are two metal plates on either side bent out to form four flanges, with rubber grommets in the center of each flange. These grommets fit around four plastic posts; labeled E, F, G, & H; which are attached to the lower half of the case. Hold the PCB down with one hand and gently lift off the side of the mechanism that fits around posts G & H. Hold only the flanges while lifting. Do the same on the other side. **DO NOT TOUCH THE ROLLER OR ANY OTHER PART OF THE PRINTER SINCE IT IS DELICATE AND COULD BE DAMAGED.** Place the mechanism in the top cover along with the screws and paper and place aside. Remove the PCB from the case by sliding a small screwdriver between the PCB and case and lifting. Centered on the rear edge of the PCB is the power jack. 1/4 inch below it are two groups of three feedthrough holes, each group in the shape of a triangle. Locate the feedthrough hole, labeled 'C' in Fig.1, in the group on the right. One inch below this hole is another hole, labeled 'D' in Fig.1. The dotted line joining points C and D refers to the trace connecting them on the other side

of the PCB. The jagged lines crossing the trace denotes that the trace should be cut. Cut it. In the lower left hand of the PCB is a feedthrough hole labeled 'B' in Fig.1. Turn the PCB over and with a sharp knife or blade gently scrape off the protective coating to expose a 1/4 inch area of copper around 'B'. This will be the 'ground' to which you will solder one end of the LED.

Look at the LED. You should see a flat side around its rim and the shorter of its two leads should be next to this flat side. This is the cathode, or negative, lead. On some LED's you will see a notch instead of a flat side above the cathode. From the component side, push the cathode, or shorter leg, through hole 'B' and solder it to the copper area you just exposed. Make sure the solder connection is shiny and smooth. Now solder the other LED lead to either end of the resistor and solder the other end of the resistor to point 'A'. This is the positive side of the LED and the resistor acts as a current limiter and protects the LED from excessive current. Point 'A' is the lead on the disc capacitor C11, which is connected to the positive lead on the electrolytic capacitor C10. Turn the PCB over to verify this. If C11 is placed too close to the surface of the PCB, turn the PCB over and solder the resistor to the solder pad corresponding to point 'A'. We are now going to connect the switch. From the component side, push the stripped end of one of the hook-up wires through hole 'C' and solder it. Push one end of the other wire into hole 'D' and solder it. Make sure the trace between points 'C' and 'D' is completely cut. A cut about 1/10th of an inch should do it.

TO BE CONCLUDED
IN THE NEXT ISSUE

CATS maintains a gratis exchange of newsletters with approximately 30 Users groups across the U.S. Clubs not sending a n/l to us for six months are automatically taken off the list.

Monthly meetings are held from noon to 5 PM, on the second Saturday of each month, at the New Carrollton Branch Public Library.

President Tom Bent
 Vice-President Hank Dickson
 Treasurer Ruth Fagley
 Editor & contact person Vernon Smith (703) 978-1835
 Printing Stan Guttenberg
 Mailing Bob Curruitt

is a not-for-profit group devoted to serving the interests of those who own, use, or are interested in the Timex/Sinclair family of computers.

The Capital Area Timex Sinclair Users Group

TimeX SIG on CompuServe: Wednes- day night, 10 P.M. Eastern time (GD CLUB).
 MAX 885: (505) 522-7081 FID0 net 15, node 6. East Coast dial (703) 547-4815 FID0 net 18, node 9.

Networks

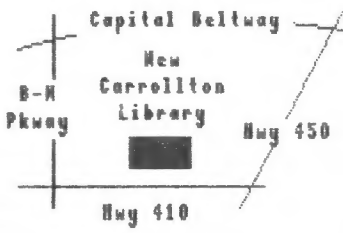
Memberships cost \$18 per year, are good for 12 months, and include all privileges (access to libraries, group bugs, etc.). Newsletter subscription only is available for \$12 per year.

Newsletter

CATS Newsletter
 P.O. Box 467
 Fairfax Station, VA 22039



FIRST CLASS MAIL



Donald S. Lambert
 3310 Clover Drive S.W.
 Cedar Rapids, Iowa 52404

The next meeting of CATS will be held on:
 Saturday, September 12, 1987 2:00 PM General Meeting
 12:00 PM Hardware Meeting

At: New Carrollton Public Library
 7414 Riverdale Road (Hwy 410), New Carrollton, MD

IF YOU ARE NOT A MEMBER OF CATS, THIS IS THE ONLY ISSUE WILL RECEIVE

DUES: \$18 per year, per family